WSR-88D Status And Plans

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15 January 2004
National Weather Service
Family Of Services Meeting
Seattle, WA







Overview



- Level II Data Status And Plans
- NWS Level II Network Architecture
- NEXRAD Program Plans Impacting External Users
 - Radar Product Generator Build 5
 - Radar Data Acquisition
- Additional Information
- Wrap Up



Level II Data Status And Plans



- NWS Will Have 121 NWS And 3 DOD Sites On "CRAFT"/NWS Network (Initial Operating Capability) By End Of February 2004
 - 102 Sites On Line As Of 1/15/04
 - Network A Mixture Of
 - CRAFT Communications And NWS Network
 - Assorted LDM/Compression Hardware Platforms
 - NWS Server At Univ. Of Maryland In Place
 - Data Receipt Reliability And Time Latency Exceeding NWS Requirements



Level II Data Status And Plans



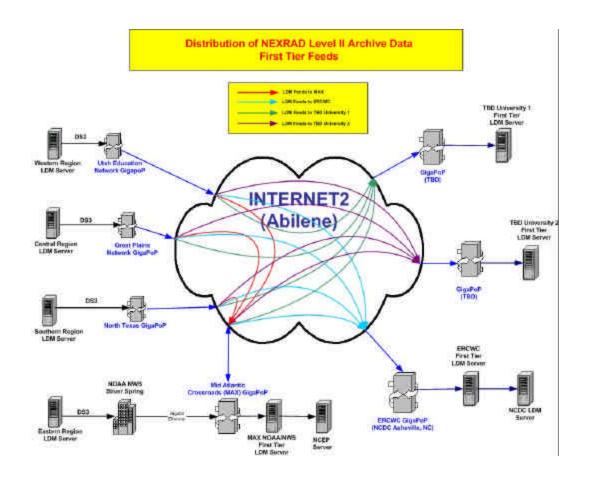
(Continued)

- NWS Will Announce Initial Options For Distributing Level II Data To Universities And Private Sector By End Of February
 - NWS Used Inputs From June 2003 Public Meeting And Follow-Up Comments
 - Private Sector Able to Choose The Preferred Option, Or Develop Other Arrangements
 - NWS Welcomes Comments And Questions On The Initial Distribution Plans
 - Discuss At This Meeting
 - Send Email To <u>Tim.D.Crum@noaa.gov</u>

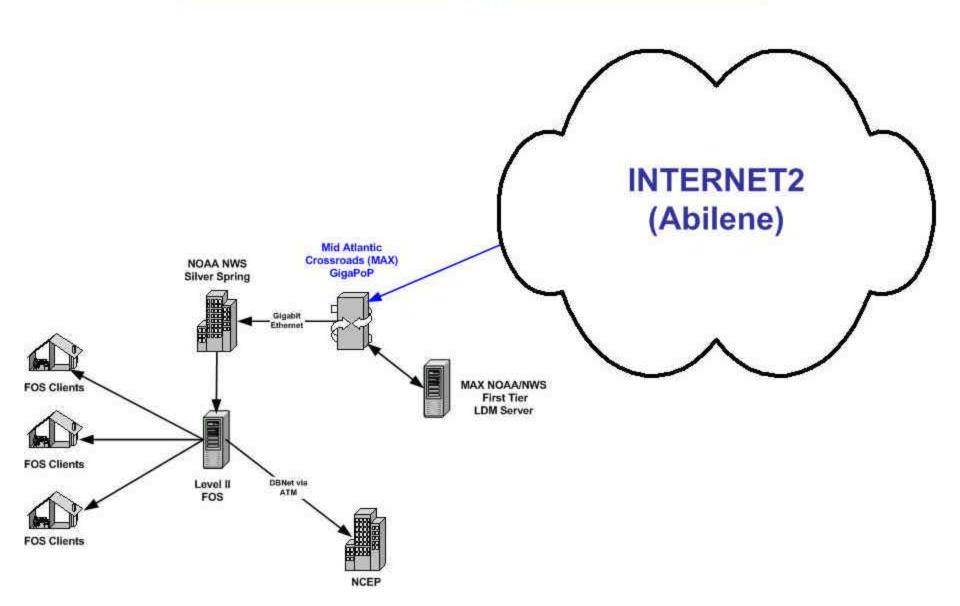


NWS Level II Network Architecture





Distribution of NEXRAD Level II Archive Data MAX / NCEP with FOS 12/09/03





NEXRAD Program Plans Impacting External Users



- Radar Product Generator (RPG) Build 5
 - Beta Test At 7 Sites Begins Mid February 04, Field Release Begins 3/29/04
 - Major Changes
 - Two New Volume Coverage Patterns (VCPs)
 - VCP12
 - » 4.1 Minute, 17 Scans, 14 Elevation Angles
 - » Improved Storm Detection And Tracking
 - » Improved Vertical Resolution Of Storms
 - VCP121
 - » Same Angles As VCP21, But 20 Scans Vice VCP21's 11 Scans And 5 Min. Vice VCP21's 6 Min.
 - » Provides Improved Velocity Dealiasing/Reduction Of "Purple Haze"



NEXRAD Program Plans Impacting External Users



(Continued)

- Level II
 - Add Metadata To Data Stream
 - Software & Hardware To Enable Addition Of BDDS At Remaining 7 DOD Sites For FOC As Originally Planned
 - Software To Move LDM & Compression To BDDS
 - » Removes PCs
 - » Transition All Communications To NWS Network
 - » Completes NWS Architecture
- New Precipitation Algorithm (EPRE)
 - Required For New VCPs And New Science For Precipitation Estimation
 - Users May See Different Patterns Of Anomalous
 Precipitation And Effects Of Exclusion Zones



NEXRAD Program Plans Impacting External Users



(Continued)

- Radar Data Acquisition (RDA)
 - NEXRAD Program To Implement Open RDA (ORDA)
 - Beta Test Beginning In September 2004
 - Deployment September 2004 December 2005
 - ORDA Impacts Noticeable To External Users, Initial Deployment
 - Improved Data Quality
 - ORDA Enables New Science Possibilities Such As:
 - 0.25 km Reflectivity
 - 0.5 Degree Azimuthal Sampling
 - Additional Data Quality Improvements
 - Dual Polarization (Phase 1 Approved In November 2003)



Additional Information



- NWS And DOD Have Agreed To Install BDDS At All CONUS DOD WSR-88D Systems
 - Hardware And Software To Be Installed In Last 10 DOD WSR-88Ds In CONUS By March 2005
- No Plans For OCONUS Connections At This Time
- FMH-11 Being Updated
 - Part A Updated June 2003, Target March 2004 For Next Update
 - Parts C And D Update In Progress, Target Early 2005 Publication
 - Part B Update To Start Later In Year, Target Spring 2005
 Publication
 - Plan To Post Final Copies On Web
 - Plan To Update With Each Software Release (6-Month Build Cycle)



Additional Information



- URLs For Additional Information
 - ORDA: http://www.orda.roc.noaa.gov/
 - RPG Build 5: http://www.nws.noaa.gov/tg/rpccds.html
 - Level II Program Information: http://www.roc.noaa.gov/NWS_Level_2/
 - Contact Tim Crum (<u>Tim.D.Crum@noaa.gov</u>) For RPG Build 5
 Sample Level II Data Streams And Interface Control
 Documentation



Wrap Up



• Comments, Questions, And Suggestions